

**U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT**
Gold King Mine Spill - Region 6



Mobile Command Post

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI**

**Subject: POLREP #4
Gold King Mine Spill - Region 6**

**Various New Mexico locations, NM
Latitude: 36.8374600 Longitude: -107.9916800**

From: Ronnie Crossland, Region 6 Regional Incident Commander (RIC)
Date: 8/10/2015
Reporting Period: 8/10/2015 0700 – 8/10/2015 1900

1. Introduction

1.1 Description of Threat

Region 8 reported approximately three million gallons of mine waste water was released into Cement Creek and the Animas River. The primary environmental concern is the pulse of contaminated water containing sediment and metals flowing as an orange-colored discharge downstream through Durango, Colorado, and into New Mexico and Utah.

1.2 Preliminary Removal Assessment/Removal Site Inspection Results

Water sampling is ongoing (analytical results are pending), and field pH levels and other water quality parameters are being monitored.

2. Current Activities

2.1 Operations Section

Final lab data has been received on the 2 samples taken by Region 8 in New Mexico on August 6, 2015 and the 4 samples taken by Region 6 on August 7, 2015. All of these samples were collected prior to the impacted water arriving in the area. Final results indicated no exceedances for Maximum Contaminant Levels (MCLs, drinking water standards), for recreation scenarios, and for acute/chronic effects to aquatic life.

Responding to a report of stained wildlife the New Mexico Department of Game and Fish flew the NM portion of the river. They observed a few birds with staining, but this staining did not affect their ability to fly. Also no fish kills were observed.

EPA assisted NMED with staffing a booth at the San Juan County Fair. Approximately 200 people signed up for the testing of their private water wells.

Private Drinking Water Well Sampling –

- NMED Ground Water Bureau initiated well sampling on August 10, 2015. Three sampling crews were deployed. An EPA staff person accompanied one of the crews. Sampling was conducted at private wells that meet the sampling criteria (500 feet distance from river and wells shallower than 100 feet in depth).
- Fourteen private wells were sampled today for metals, pH, and conductivity.
- Six additional private wells were sampled for pH and conductivity with metal samples to be gathered later.
- Seven teams are scheduled for private well sampling on August 11, 2015.

Surface Water and Sediment Sampling –

- EPA collected surface water samples on August 10, 2015 at nine locations in New Mexico along the Animas River and San Juan River. Basic water chemistry parameters were recorded including the surface water pH. The surface water pH ranged from 7.47 to 8.55. The State of New Mexico has specified a pH range of 6.6 to 9.0 for the Animas River and San Juan River as part of their state water quality standards. All the sample locations on August 10, 2015 had pH levels within the pH range specified by the State of New Mexico.
- The State of New Mexico Environment Department recommended that EPA analyze for chlorides, sulfates, fluoride and nitrates. At the request of New Mexico, EPA will add these parameters to the filtered surface water samples. These analyses will also be run on samples taken prior to today.
- In addition to the surface water samples, one sediment sample was also taken.

Drinking Water Systems Update

- Based on conversation with the State of New Mexico and drinking water systems on August 10, 2015, the following is the list of affected water systems and their status:

| System Name | Population | # Days Water Available |
|---------------------------------|---------------|---------------------------------|
| Aztec Domestic Water System | 6800 | 10 days |
| Farmington Water System | 47000 | 60 days |
| Lower Valley WUA | 8428 | 8 days |
| Morningstar Water Supply System | 6423 | 7-14 days |
| Northstar WDWCA | 4123 | 45 days |
| Southside Mutual Domestic | 1593 | 5 days but depends on Aztec |
| Upper La Plata WUA | 2265 | Depends on Aztec and Farmington |
| Flora Vista | 4300 | 1 day but depend on Aztec |
| Total Population | 80,392 | |

EPA will be meeting with the county to discuss the number of people needing water assistance for agriculture or livestock.

ASPECT conducted two missions on August 10, 2015, including a photo survey from Farmington to just short of the mine. A photo survey of the San Juan River was also conducted until being stopped due to weather. Examination of photos from Farmington to the end of the survey show fading of the orange color in the water. In several frames, the discoloration is most evident on sand bars and in back waters.

2.3 Finance Section

Daily Cost Estimates Report

| Funding Source | EPA Expended Payroll | EPA Expended Travel | Contract Costs | TOTAL Expended | Est. Burn Rate |
|----------------|----------------------|---------------------|----------------|----------------|----------------|
| EPA | \$39,570.00 | \$8,100.00 | \$127,400.00 | \$175,070.00 | \$62,186.00 |

3. Participating Entities in Region 6

US EPA
USFWS
NMED
NM Department of Health
NM Office of the State Engineer
NM Department of Game and Fish
County of San Juan – New Mexico

4. Personnel

| Group | Number |
|-------------------------------------|---------------|
| Region 6 EPA @ REOC | 14 |
| Region 6 Contractors @ REOC | 4 |
| Region 6 Staff in JIC – Durango, CO | 2 |
| Region 6 EPA in Field (R6) | 11 |
| Region 6 Contractors in Field | 30 |